

In the Claims:

Cancel claims 2, 7 and 11-15 without estoppel or disclaimer of the subject matter thereof.

Amend claims 1, 3-6 and 8-10, as follows.

1. (Currently Amended) A ~~blade shape designing~~ method for designing a shape of a blade having operational stability where a the shape of a the blade is designed while a plurality of objective functions are optimized, wherein the plurality of objective functions include at least one of a trailing-edge deviation angle, a pressure loss coefficient, a maximum slope of blade surface Mach number for pressure distribution, a lift/drag ratio, a blade load and incidence toughness, that indicates operation stability of the blade, the method comprising the steps for: and

performing an optimization analysis is performed on the plurality of objective functions according to Pareto optimization approach; and

selecting so that Pareto solutions can be found from the optimization analysis on the basis of consideration of a trade-off relationship between the objective functions.

2. (Cancelled).

3. (Currently Amended) ~~A blade shape designing~~ The method according to claim 1, wherein the incidence toughness is ~~evaluated by the sum of~~ determined from first and second evaluation values of a parameter evaluating the shape, which can be obtained by evaluating the parameter at first and second incident angles whose signs are, respectively, opposite to each other, with respect to a design point of about an incident angle, respectively with respect to a design point on the blade.

4. (Currently Amended) ~~A blade shape designing~~ The method according to claim 3, wherein the absolute values of the first and second incident angles are 10° or less.

5. (Currently Amended) ~~A blade shape designing~~ The method according to claim 1, wherein the Pareto optimization approach is a Multi-Objective Genetic Algorithm.

6. (Currently Amended) ~~A computer-readable information~~ implemented program stored on computer-readable medium on which a program is recorded for a computer to execute a blade shape designing method where a shape of a blade having operation stability where the shape of the blade is designed while a

plurality of objective functions are optimized, wherein the program instructs the computer for:

~~to execute~~ executing a step where at least one of a trailing edge deviation angle, a pressure loss coefficient, a maximum slope of blade surface Mach number or pressure distribution, a lift/drag ratio, a blade load and incidence toughness is that indicates operation stability of the blade are set as one of the plurality of objective functions; and ~~a step where~~

performing optimization analysis according to Pareto optimization approach ~~is performed~~ on the plurality of objective functions so that Pareto solutions are obtained on the basis of consideration of a trade-off relationship between the plurality of objective functions.

7. (Cancelled).

8. (Currently Amended) ~~A~~ The computer-readable information medium implemented program according to claim 6, wherein the incidence toughness is determined from ~~evaluated by the sum of~~ first and second evaluation values of a parameter ~~evaluating the shape, which can be obtained by evaluating the~~ parameter at first and second incident angles whose signs are, respectively,

opposite to each other, ~~with respect to a design point of about~~ an incident angle,
respectively with respect to a design point on the blade.

9. (Currently Amended) A ~~The computer-readable information medium~~
implemented program according to claim 8, wherein the absolute values of the
first and second incident angles are 10° or less.

10. (Currently Amended) A ~~The computer-readable information medium~~
implemented program according to claim 6, wherein the Pareto optimization
approach is a Multi-Objective Genetic Algorithm.

11. – 15. (Cancelled).